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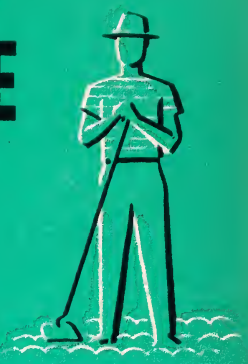
HOME VEGETABLE GARDENING



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HOME VEGETABLE GARDENING

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Almost all vegetable crops may be divided into two groups:

1 COOL-SEASON CROPS

These generally have more food value on a pound and acre basis.

We eat a vegetative part of the plant:

ROOT—Carrot, parsnip, beet, radish, turnip, white potatoes

STEM—Asparagus

LEAF—Spinach, lettuce, celery, cabbage, onion

IMMATURE FLOWER PARTS—Cauliflower, sprouting broccoli, globe artichoke

These vegetables should be planted in the cooler part of the year, and produce their crop in a cool season.

Size is small to medium
Root depth is shallow to medium
Correct storage temperature is 32° F.*

2 WARM-SEASON CROPS

These are generally less efficient food producers on a pound and acre basis

We eat the fruit of the plant:

Mature—Tomatoes, watermelon, cantaloupe, winter squash

or

Immature—Summer squash, cucumber, snap and lima beans, sweet corn

These vegetables should be planted and harvested during the warm season of the year.

Size is medium to large
Root depth is medium to deep
These crops generally do not store well for very long periods

There are two exceptions to the above classification: Peas, a fruit, are a cool-season crop; sweet potatoes, a root, are a warm-season crop.

* Except white potatoes, which should be stored at 40°–50° F.

It is not hard to grow good vegetables

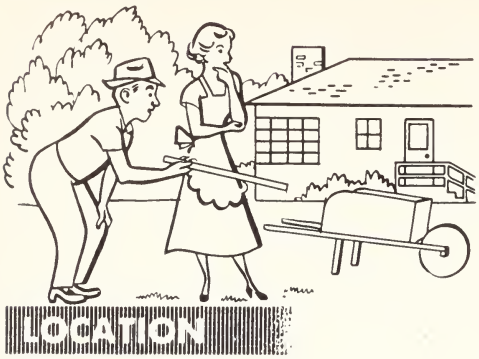
It's all a matter of following a few simple rules. These general rules apply, whether you have a small city lot or a ranch garden. Differences will be mainly in the amount and kind of vegetables you choose. For the small garden, you will probably grow a limited number, and will select the ones your family likes best, and the ones with the greatest food value per pound. A larger garden will allow a wider choice, extra vegetables for storage, and may include some crops which have less food value, and take up more space, such as watermelons.

Here are the general rules

(The chart on page 16 gives specific rules for each vegetable)

1. Plant at the proper time of the year, when the temperature is right for the particular crop to be grown. Climatic and temperature requirements vary with different vegetables, and poor judgment with regard to time of growing will result in poor yields and quality.
2. Plant on the best type soil available. This is important, although it is possible to raise a successful garden on all but the poorest of soils.
3. Space plants properly to make the best use of available land.
4. Give the vegetables a reasonable amount of care, including weeding and irrigation.
5. Harvest when vegetables are at the proper stage of maturity.

PLANNING YOUR GARDEN



LOCATION

The first step in planning any garden is to choose the best possible spot in which to locate it. In deciding where to plant your vegetable garden, keep in mind the following:

Good soil. This is a factor which you cannot control completely. But you can, by a simple test (see page 10), find out whether your soil is in good condition for planting. Proper working and use of fertilizer will improve poor soil and also increase the yield on soil that is good to begin with.

Lay of the land. Level ground is the best for growing vegetables. It is easier to prepare, plant, and irrigate than is sloping ground. If the ground you have is not level, a gentle slope to the south or southeast is all right, as it will make the most of available sunshine. Run rows across the slope, not up and down. This keeps the soil from washing down during irrigation.

Water supply. Make sure that your garden is near a good water supply or can be easily reached by sprinkler attachments.

Adequate light. Do not plant vegetables where they will be shaded by trees, shrubs, walls, or fences. They need maximum sunlight for the best growth. Trees and shrubs also take water from the soil, and encourage birds which damage young plants.

Accessibility. If possible, plant your garden near the house. You will be more likely to use spare time for working in it if it is easily reached. And you will not want to carry tools back and forth over a long distance.

Where the garden is large enough so that power tools will be used in preparing the ground, there must be access to a road or driveway wide enough for moving of equipment.

ARRANGEMENT

To get the most out of a small area, make a rough plan for your garden. In the chart on page 16, you will find the recommended spacing for each crop. If horse or tractor cultivation is used, the width of the equipment will determine the distance between rows.

Keep these points in mind in planning your garden:

1. A small garden, well cared for, is better than a large, neglected one.

2. Long rows save time in care and cultivation. Several crops may be planted in the same row if the distance between rows is the same. Check the chart on page 16 to find crops with similar space requirements.

3. Because perennials will be growing in the same spot for several years, plant them in their own special area at one side of the garden so that they will not be disturbed by preparations for the annual crops.

4. Space for spring crops, which will be harvested early, may be used again for later crops. For example, tomatoes may follow radishes, or cucumbers be planted after spinach.

5. Tall crops, such as corn and pole beans, may be planted together. If possible, plant them on the north side of the garden where they will not shade the low-growing crops.

WHAT TO PLANT

In deciding what to plant in a small garden, here are some points to consider:

1. Do not waste space. Plant enough of each vegetable for the family's needs, but not more than you can use. You may wish to plant more of crops that store well (see chart, p. 16) than of those that must be eaten as soon as they are ripe. You may also want to allow extra for canning or freezing.

2. Remember that some plants, such as melons, potatoes, sweet corn, and asparagus, take up quite a bit of room. You may have to plant less of some crops if you want several kinds of vegetables in a small garden.

3. Some crops, such as radishes, sweet corn, and lettuce, have short periods of yield. These should be planted more than once during a season to provide a continuous supply, if your climate permits.

SEEDS AND PLANTS

Many of the vegetables you plant will be grown right in the garden, from seed. But for some, you will buy young plants from the nursery and set them out in the garden. These plants have been started from seed, under sheltered nursery conditions, at an earlier time than you could safely plant the seed outdoors. These seedlings will be ready to harvest earlier than if you had to wait for the ground to get warm enough to start them from seed.

The vegetables you will most likely buy in the seedling stage for transplanting are: tomatoes, peppers, broccoli, celery, cabbage, cauliflower, and eggplant.

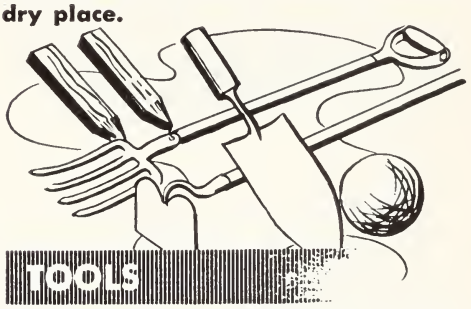
If you wish, you may grow any of the above-mentioned vegetables ahead of the season, in a hotbed or coldframe. For directions on construction of a hotbed, see page 6. For help in seeding and transplanting, turn to page 8.

Here are some tips to keep in mind when buying seeds and plants:

1. Buy seeds or plants from a reliable dealer or nursery. If your neighbor has been growing successful gardens, ask his advice on where and what to buy.

2. If your local dealer does not have all the varieties you want, order by mail from a dependable company.

3. Be sure the seed you buy is fresh. Some seed, such as corn, onion, parsley, and parsnip, loses its viability after about one year. The seed of most other vegetables will be good for about three years. Some companies date their seed packets. It is sometimes more economical to buy seed known to keep for several seasons in larger amounts. Note date of purchase on the packets. Do not use any seed for more than two or three years. Store any leftover seed in a cool, dry place.



TOOLS

You will not need many tools for use in a small garden, but the ones you do buy should be of good quality.

Spade or Spading fork You'll need these to turn the ground, turn under manure, and to break up large clumps of soil.

Rake For smoothing out after spading, and preparing the seed bed. Good for clearing up rubbish and getting after small weeds.

Hoe This takes care of tough weeds and, when turned sideways, digs the V-row for planting. Also used to cover seeds.

Yardstick, Twine, and Stakes For getting the rows evenly spaced and laid out in straight lines.

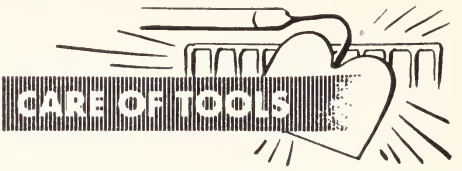
Putty knife or Spatula Handy for blocking out seedlings when transplanting. Also useful for cleaning tools.

Small hand Sprayer and Duster These keep the insects and diseases or pests under control.

Trowel One of the handiest of garden gadgets. Useful in transplanting and in loosening soil around plants.

Dibble This is a short, round, pointed stick used to make holes for transplanted seedlings, and firm dirt around the roots.

Wheel hoe This tool has several attachments. It is useful in weed control, and for making furrows for deep-seeded crops.



1. Clean tools after using. A putty knife is good for scraping off dirt.

2. Keep tools in a dry place to prevent rust. If they do get rusty, soak them in kerosene for a few hours, then scrub off rust with a wire brush or with fine sand.

3. Keep cutting tools, such as hoes, sharp.

4. Have a special place for tools where they may be hung up out of the way. This prevents damage both to you and to the tools.

If you have decided to get a head start on your garden by growing some seedlings in a hotbed or coldframe for later transplanting, here is how to go about it. If there is any extra space, it may be used to produce early crops of small vegetables, such as radishes, spinach, and lettuce.

One hotbed, 3 × 6 feet, will be enough for the average home garden.

Place the hotbed where it will have

. . . protection from strong prevailing winds

. . . good natural drainage

. . . abundant sunlight

. . . available water supply

To prepare the hotbed for planting:

Place fresh horse manure in a compact pile. When heating begins, place the part heating most violently in the bottom of the frame, the rest over it.

After each 3- or 4-inch layer has been added, tamp it down so that the bed will be evenly packed. The amount of manure used will depend on the air temperature. More is needed in a cool climate.

Spread about 6 inches of good garden loam, sifted, over the manure.

Do not sow seed for one week, or until the first strong heat is over, and any weed seeds in the soil have had a chance to sprout. Remove these before planting.

Sow seeds in rows spaced about 4

inches apart. Sow cabbage, cauliflower, and other seeds of similar size in shallow furrows and cover with about ½ inch of soil. Barely cover small seeds, such as celery.

After seeding, tamp down soil firmly, water gently, so that the small seeds are not washed out, cover, and leave until the seedlings break through the soil. Any material may be used for a cover that will hold heat in, permit light to enter, prevent freezing, and protect from heavy rains. Medium-weight unbleached muslin is good except where cold is extreme. Ordinary window glass is good.

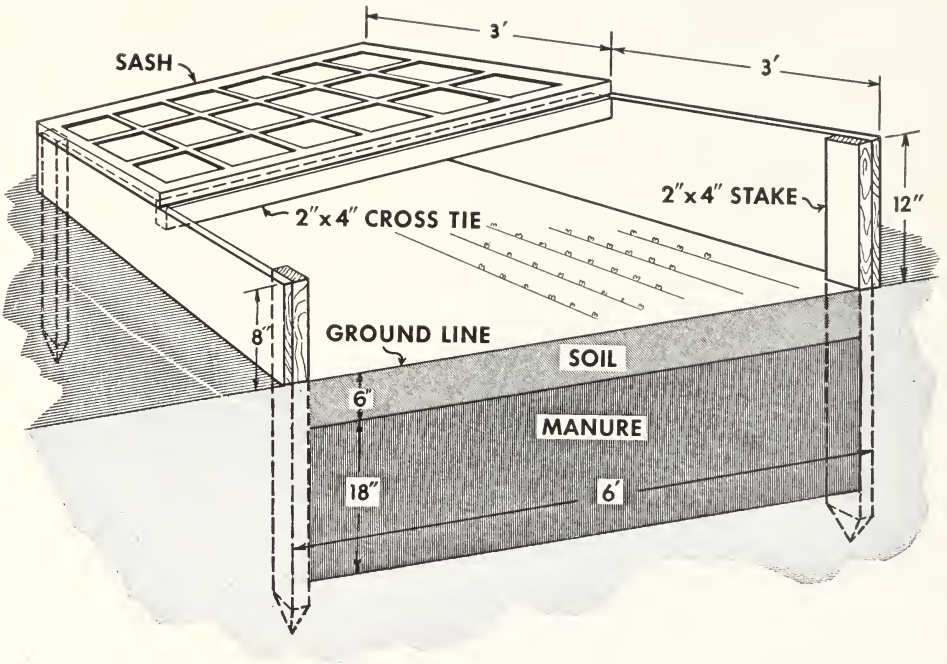
When seedlings appear, give them plenty of sun and good ventilation. Avoid too high temperatures, or the plants will be weak and leggy, and subject to disease. On warm, sunny days, prop up the cover at one end or on the side away from the wind.

Water thoroughly when necessary, but only on bright mornings. Plants should be hardened before transplanting. This is accomplished by removing covers day and night and keeping plants on the dry side or without water for about one week. Plants should be watered immediately before removal.

Plants will not suffer much setback in growth during transplanting if they are moved with a block of moist soil around them.

Water generously around each plant after transplanting, and shade with paper, or a shingle, until plants are growing well.

There are other ways of heating the hotbed besides using manure. Steam, hot air, hot water, or electric heating cable may also be used. Or the hotbed may be placed so that a cellar window opens into it, and provides warm air. In mild climates, heat from the sun may be enough. When sunlight instead of artificial heat is used, the beds are called coldframes.



Drawing shows hotbed with two 3-foot sections. One 3 × 6-foot bed is about right for the average family. If you build your own, you may buy standard size, 3 × 6-foot frames for the cover. Note layering of manure and topsoil.

SEEDING AND TRANSPLANTING

These pages show the steps in growing tomatoes from seed until they are ready for transplanting to the garden. This is the method to use for any plants that you start in a hotbed or coldframe.

1 Sow seeds in flats or in soil of hotbed. Cover with ½ inch of soil. Seeds grow best at 65° to 75° F. Temperature may be lowered by ventilation of the flat, or raised by adding extra covers.

2 Remove seedlings from flat, using a pencil or a small dibble.

3 Plant seedlings in another flat, spacing them 2–3 inches apart. Use a pencil or small dibble to make holes.

4 When plants are ready for the garden, soak them well before transplanting.

5 Take up some soil with each plant. Use a trowel to make holes. Firm the soil around each plant, and water gently.

6 After staking, cut out the secondary branches between the leaf and the main stem. Handle the plants carefully to avoid damaging tender leaves and stems.

7 Tie the stems loosely to the stake so that the twine will not cut into them as they grow larger. Use soft twine with some "give" to it.

8 Staked tomatoes produce clean fruits, easy to pick.

SOIL PREPARATION

Crops may be grown on sandy loam, loam, or clay soils.

Sandy loam, or loam, irrigate and drain well, and are easy to keep in good condition.

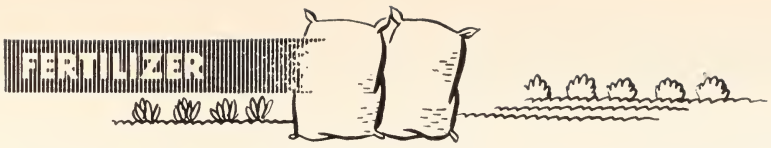
Clay soil is usually more productive than loam, but it is slower to warm up in the spring, and requires more care.

Sandy soil has the least available water per foot of depth; clay soil has the most.

The first step in soil preparation is spading or plowing the garden. Do not spade if the soil is too wet, especially on clay. In some areas, it is possible to give the garden an early spading before winter rains or frosts come. The soil is usually worked to about 6 inches deep. Immediately after spading, break up big chunks with a spading fork or rake, and see that the soil is well pulverized.

Pick up a handful of soil and squeeze it. If it forms a mud ball (see left), it is too wet to be worked. Working soil in this sticky condition may cause hard lumps to form which will be a handicap all through the season.

If the soil crumbles easily in your hand (see left), it is "friable." This means that it is in ideal condition to work.



Manure is a good natural fertilizer and, if available, may be used to supply your garden soil with the necessary amounts of nitrogen, phosphoric acid, potash, and organic matter. In the Imperial and Coachella valleys, the manure should be supplemented with treble or superphosphate.

Do not use manure containing a large amount of straw, as the straw does not work into the soil well, and may use up soil nitrogen. The manure should also be fairly free of weed seeds.

Apply manure to the garden each year, in the fall, at the rate of about ½ to 1 pound per square foot.

Commercial or chemical fertilizers may also be used to increase yields if manure is not available. Most of the fertilizers used on field crops are also good for the home garden.

In the Imperial and Coachella valleys, the soils frequently need nitrogen and phosphoric acid, while in other parts of the state, nitrogen is the main element needed.

Several compounds are good sources of nitrogen. These include ammonium sulfate, sodium nitrate, calcium nitrate, and uramon.

Phosphates are sold under the labels of superphosphate or treble phosphate. Ammophos contains both nitrogen and phosphoric acid. All so-called complete fertilizers are labeled according to their chemical analysis. For example, 10–10–5 means that the product contains 10 per cent nitrogen, 10 per cent phosphoric acid, and 5 per cent potash. These fertilizers are applied yearly at the rate of 1 to 3 pounds per 100 square feet. They may be scattered over the ground in the spring before it is spaded or plowed.

Nitrogen compounds are sometimes applied along plants when they are one-third grown, to increase the growth of such leaf crops as lettuce, chard, spinach, and cabbage. This is called "side dressing." If you use this method, be sure to keep the fertilizer several inches from the plants to prevent injury to the roots, and several inches to the side and below newly planted seeds. Apply at the rate of ½ to ¾ pound per 100 feet of row.

During the rainy season, nitrogen fertilizers may be applied to the soil surface. The rain will carry them down to the plant roots. Or crops may be side dressed and then irrigated.

Do not get fertilizer on the leaves of the plants. It will burn them, especially if they are wet.

Spacing for different vegetables will be found in the chart on page 16.

The distance between the rows depends upon the size of the plants when full grown. The depth of planting, either in the garden or in hotbed or coldframe, depends upon the size of the seed. Plant small seed about ½ inch deep. Plant snap beans and sweet corn 1 to 1½ inches deep.

A general rule for planting seed: Plant to a depth four times the average diameter of the seed.

When transplanting seedlings, plant them to the depth at which they were growing in the hotbed or flat. Make planting holes large enough so that the roots will not be crowded. Be sure to firm the soil around the roots.

Seasonal temperatures are a very important factor in determining when a crop should be planted.

Vegetables fall into two main classes: cool-season and warm-season crops. Seed of cool-season crops will germinate better with cool soil temperatures than will seed of warm-season crops. Average monthly temperatures for cool-season crops are 60° to 65° F during the growing period; for warm-season crops, 65° to 80° F, with some, such as watermelons and sweet potatoes, thriving at 70° F or over.

Consult the chart on page 16 for planting times for the four different areas of California. These dates are based on the average temperatures for each area, and you may have to make some adjustment if your section varies widely from the average. The planting times given are for seeds unless otherwise stated. Allow 8 to 12 weeks for seeds to produce plants for transplanting.

Other climatic factors affecting growth and quality of vegetables are soil moisture, air temperature, and length of day from sunrise to sunset. For example, Brussels sprouts and globe artichokes only grow successfully near the ocean, where humidity is high and temperatures cool. And many annuals, such as radish, lettuce, spinach, and Chinese cabbage, tend to produce flowers as the days grow longer near June.

Temperature is probably the most important climatic factor affecting the success of your garden. Study the planting chart for your area carefully. It will repay you in the yield and quality of the vegetables you grow.

Most areas of California need irrigation to insure that the soil will provide the plants with the moisture they need for maximum growth.

In normal years, in most areas, winter rains usually wet the soil, by spring, to a depth of 6 feet. If the soil is not wet to this depth, it should be irrigated before seeding, so that several feet are wet.

Vegetables differ in their needs for amount of water and frequency of application. In the home garden, it is usually best to adjust irrigation to meet the needs of the shallow-rooted crops. If these are satisfied, the medium- and deep-rooted ones will automatically get enough water. (See page 14.) This same rule applies where the topsoil is shallow, providing only 1 or 2 feet of dirt for root growth.

Clay soils hold more usable water than do sandy ones, and do not need irrigation so often. Each foot of depth of sandy soil usually holds ¾ inch of usable water. The same depth of clay soil holds 2 to 2½ inches.

Irrigate your vegetable garden about once a week. Wet the soil to a depth of at least 2 feet at each watering.

If only the surface of the soil is kept moist, most of the water evaporates to the air and is lost to the roots, which are rarely in the top 3 or 4 inches.

Do not waste water. There are simple ways to measure how much water you give your garden.

If you use a sprinkler system, place some empty cans under the spray at various spots, keep track of the time the

sprinkler is on, and measure the depth of water in the cans when you turn off the water. Average the various depths to determine how much water your garden is getting at each sprinkling.

If you use a garden hose, turn it on to the force you normally use, and time it to find out how many minutes it takes to fill a 1-gallon can. This will give you the rate of flow per minute. One gallon of water will cover 1 square foot of ground to a depth of 1.6 inches.

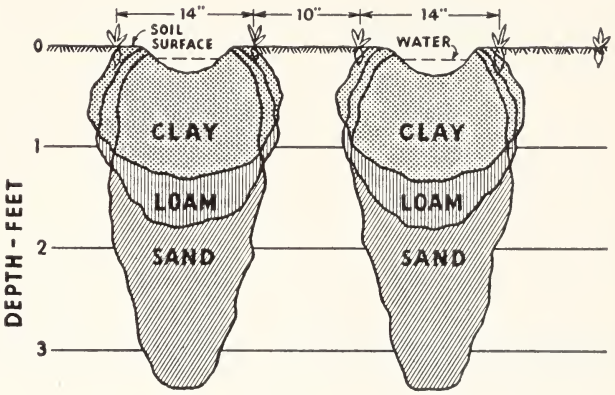
You may want to use a method of surface irrigation. This system does not wet the leaves as do sprinklers—an advantage because foliage wetting sometimes increases plant diseases.

If you plan to use this method, there are two planting arrangements you may follow:

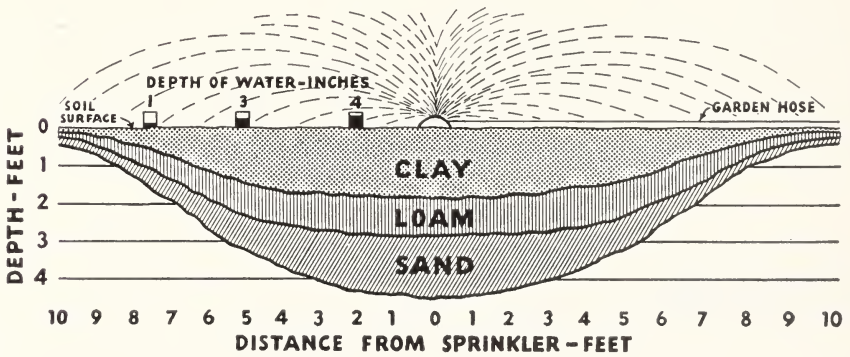
1. For small crops, such as lettuce and carrots, seeds are planted in beds raised 5 or 6 inches above ground level, 12 to 16 inches wide on the top, with 2 rows to a bed. The beds should be about 36 to 40 inches apart from center to center. Raised beds are good for winter crops because they drain off excess rain. Irrigation water is applied in the furrows between the beds.

2. You may plant seeds at ground level, in rows 4 to 6 feet apart, with one or two furrows between rows to take water.

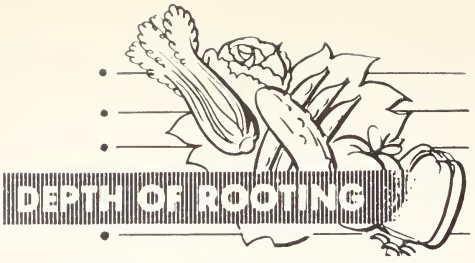
When using the surface method, more water is needed. As previously noted, the soil should be wet to a depth of 2 feet.



Right: Penetration of equal amounts of water in furrows of three soil types. Clay holds the most available water per foot of depth; sand holds the least.

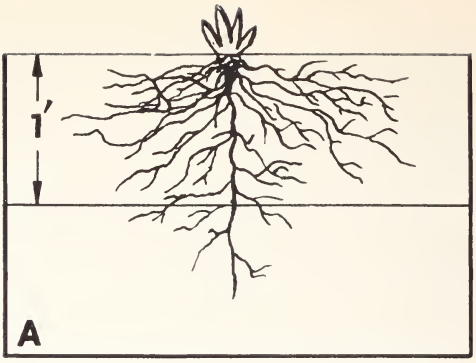


If sprinklers are used for irrigating, their sprays should overlap. Otherwise, the soil at the outer edges will not receive enough water.



A. SHALLOW Main root system is in the top 2 feet of soil.

Examples: Cabbage, cauliflower, lettuce, celery, sweet corn, onion, white potato, radish.

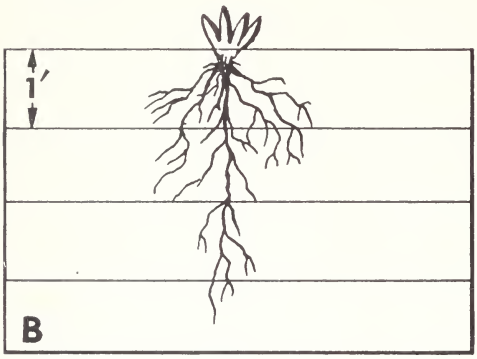


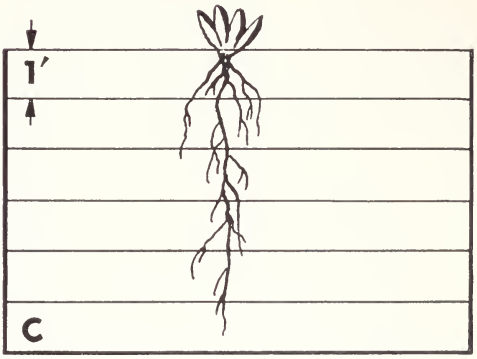
B. MODERATELY DEEP Main root system is in top 4 feet of soil.

Examples: Snap bean, carrot, cucumber, eggplant, pea, pepper, summer squash.

C. DEEP Main root system is in top 6 feet of soil.

Examples: Globe artichoke, asparagus, cantaloupe, pumpkin, tomato, watermelon.





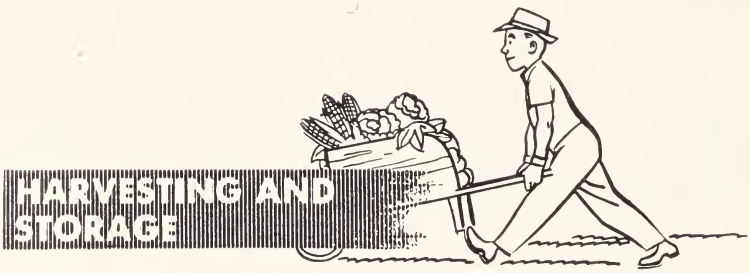
Weeds are one of your garden's worst enemies. They take water and plant foods from the soil, shade crops, thus slowing down crop growth, and choke out small plants.

The chief method of weed control in the small garden is by cultivation. If you have only a few weeds, they can be kept under control by hand-weeding.

Use a hand hoe or wheel hoe. Shallow cultivation, with knifelike blades, is best because this kills the weeds without harming crop roots.

Crops cannot grow rapidly and to good size if they are overcrowded. Small root crops, salad crops, and those grown for greens, should be thinned early. Root crops, such as beets or carrots, should be thinned to 2 inches apart. Radishes should be 1 inch apart, and head lettuce, 12 inches apart.

Carrots and other root crops should be thinned early in their growing season to insure fully developed, well formed vegetables. Left: Carrots grown without thinning. Right: Carrots properly thinned to about 2 inches apart.



To get the most out of your vegetables, you should harvest them when they are at their best stage for eating, and store them under conditions that will keep them as nearly "garden fresh" as possible.

Some vegetables have a longer edible period and keep better in storage, than do others. The quality of asparagus, sweet corn, lima beans, and peas is greatly affected by proper stage of maturity and good storage conditions, and is best with a short storage period. The best time to harvest is given under each vegetable in the section which follows. Storage times are shown in the chart on page 16.

There is always a lapse of time between the harvesting and the eating of your vegetables. Once an edible part has been removed from the plant, it has no further source of food, nor can it replace loss of water. Proper storage conditions will keep food and water losses as low as possible. To maintain vegetables at top quality after they are harvested, keep them under desirable storage conditions, and do not keep them too long.

Cool-season crops (except white potatoes) and sweet corn should be kept at temperatures between 32° F and 34° F. Beans and melons keep best at 34° to 40° F, peppers, cucumbers, and ripe tomatoes, at 40° to 50° F, pumpkins, winter squash, and sweet potatoes, at 50° to 55° F, and green tomatoes at 50° to 70° F.

Planting dates for sections of California.

Climate may vary even in small sections of the state. Since the areas shown here are large, planting dates are only approximate.

Vegetable	N. Coast: Monterey Co. north	S. Coast: San Luis Obispo Co., south	Interior valleys: Sacramento, San Joaquin, and similar valleys	Imperial and Coachella valleys	W = warm-season crop C = cool-season crop	Moderate planting for family of four	Distance apart in row	Distance between rows without beds	Recommended storage temperatures, degrees F	Storage period (No. of weeks)
ARTICHOKE[3]	Aug–Dec	Oct–Dec	. . . . .	. . . . .	C	3–4 plants	48″	60″	32.	1–2
ASPARAGUS[3]	Jan–Mar	Jan–Feb	Jan–Feb	Feb–Apr	C	30–40 plants	12″	60″ green 72″ white	32	3–4
BEANS (lima)[1]	May–June	Apr–May	May–June	. . . . .	W	15–25 ft. row	6″ bush; 24″ pole	30″	40	1–3
BEANS (snap)[1, 2]	July May–June	Mar–Aug	Apr–May, July	Jan–Mar, Aug	W	15–25 ft. row	3″ bush; 24″ pole	30″[4]	40	1–2
BEETS[1]	Feb–Aug	Feb–Aug	Feb–Aug	Sept–Jan	C	10–15 ft. row	2″	24″[4]	32	3–10
BROCCOLI[1, 3]	June–July	June–July	July	Sept	C	15–20 ft. row	24″	36″	32	1–2
BRUSSELS SPROUTS[3]	June	June–July	. . . . .	. . . . .	C	15–20 ft. row	24″	36″	32	3–4
CABBAGE[1, 3]	Jan–Apr July–Sept	Oct–Feb	July, Jan–Feb	Sept–Nov	C	10–15 plants	24″	36″	32	12–16
CABBAGE (Chinese)[1]	July–Aug	Aug–Sept	Aug	Aug–Nov	C	10–15 ft. row	6″	30″[4]	32	2–3
CANTALOUPES and similar melons	May	Apr–May	Apr–May	Jan–Apr	W	5–10 hills	48″	72″	40	2–4
CARROTS[1, 2]	Jan–Aug	Jan–Aug	July–Aug, Feb	Sept–Dec	C	20–30 ft. row	2″	24″[4]	32	16–20
CAULIFLOWER[3]	June, Jan	July–Nov	July–Aug	Sept–Oct	C	10–15 plants	24″	36″	32	2–3
CELERIAC	Mar–June	Mar–Aug	June–Aug	. . . . .	C	10–15 ft. row	4″	24″[4]	32	8–16
CELERY[1, 3]	Mar–June	Mar–Aug	June–Aug	. . . . .	C	20–30 ft. row	5″	24″[4]	32	8–16
CHARD[1]	Feb–May	Nov–May	Feb–May	Sept–Oct	C	3–4 plants	12″	30″	32	1–2
CHAYOTE	. . . . .	Apr–May	May–June	. . . . .	W	1–2 plants	72″	grow along fence	. . . . .	. . . . .
CHIVES[1]	April	Jan–Feb	Feb–Mar	Nov–Jan	C	1 clump	needs 4 sq. ft.	. . . . .	. . . . .	. . . . .
CORN (sweet)[2]	Apr–July	Feb–July	Mar–July	Jan–Mar	W	20–30 ft. in 4 rows	15″	36″	32	½–1
CUCUMBERS	Apr–June	Apr–June	Apr–June	Feb–May	W	6 plants	24″	48″	50	1–2
EGGPLANT[3]	May	April	Apr–May	Feb–Aug	W	4–6 plants	24″	36″	50	1–2
ENDIVE[1]	Mar–July	Mar–Aug	Aug	Sept–Nov	C	10–15 ft. row	10″	24″[4]	32	2–3
FLORENCE FENNEL	Mar–July	Mar–Aug	Aug	Sept–Nov	C	10–15 ft. row	4″	30″[4]	32	2–3

GARLIC	Nov–Dec	Nov–Jan	Nov–Jan	. . . . .	C	10–20 ft. row	3″	18″[4]	32	24–32
KOHLRABI	July–Aug	Jan, Aug	Aug	Nov	C	10–15 ft. row	3″	24″	32	2–4
LEEK	Feb–Apr	Jan–Apr	Jan–Apr	. . . . .	C	10 ft. row	2″	24″	32	4–12
LETTUCE[1]	Feb–Aug	Dec–Aug	Aug, Nov–Feb	Sept–Dec	C	10–15 ft. row	head 12″; leaf 6″	24″	32	2–3
MUSTARD	July–Aug	Aug–Feb	Aug	Nov	C	10 ft. row	8″	24″[4]	32	1–2
OKRA	May	April	May	Mar	W	10–20 ft. row	18″	36″	. . . . .	. . . . .
ONIONS	Jan–Mar	Nov–Feb	Nov–Feb	Nov–Jan	C	30–40 ft. row	3″	24″[4]	32	12–32
PARSLEY[1]	Dec–May	Dec–May	Dec–May	Sept–Oct	C	1 or 2 plants	8″	24″	. . . . .	. . . . .
PARSNIPS	May–June	June–July	June–July	Oct	C	10–15 ft. row	3″	24″[4]	32	8–16
PEAS[1]	Jan–Aug	Aug, Dec–Mar	Nov–Jan	Aug–Nov	C	30–40 ft. row	2″	36″ bush 48″ vine	32	1–2
PEPPERS[1, 3]	May	Apr–May	May	Mar	W	5–10 plants	24″	36″	45	4–6
POTATOES (sweet)[3]	May	Apr–May	May	Mar–May	W	50–100 ft. row	12″	36″	55	8–24
POTATOES (white)	early: Feb late: Apr–May	early: June–Feb late: Mar–Aug	early: Feb–Mar late: Aug	. . . . .	C	50–100 ft. row	12″	30″	40–50	12–20
PUMPKINS	May	April	Apr–June	Mar	W	1–3 plants	48″	72″	55	8–24
RADISH[1, 2]	all year	all year	Sept–Mar	Oct–Feb	C	4 ft. row	1″	18″[4]	32	. . . . .
RHUBARB	Dec–Jan	Dec–Jan	Jan–Feb	. . . . .	C	2–3 plants	36″	48″	32	2–3
RUTABAGAS	July	July, Mar	July, Aug	Oct–Jan	C	10–15 ft. row	3″	24″[4]	32	8–16
SPINACH[1]	Aug–Feb	Sept–Jan	Sept–Jan	Sept–Nov	C	10–20 ft. row	3″	18″[4]	32	1–2
SQUASH (summer)	May	Apr–June	Apr–June	Feb–Mar	W	2–4 plants	24″	48″	50	2–3
SQUASH (winter)	May	Apr–June	Apr–June	. . . . .	W	2–4 plants	48″	72″	55	8–24
TOMATOES[1, 3]	May	Apr–Aug 15	Apr–May	Dec–Mar	W	10–20 plants	See page	See page	50	1–2
TURNIPS[1]	Jan, Aug	Aug, Apr	Aug, Feb	Oct–Feb	C	10–15 ft. row	2″	24″[4]	32	8–12
WATERMELONS	May–June	Apr–May	Apr–May	Feb–Mar	W	6 plants	60″	72″	40	2–3

PLANTING POINTERS

Some of the items in the chart have numbers after them. This is your key to what those numbers mean:

1. Crops suggested for a small garden.
2. Crops which should be planted more than once in a suitable climate.
3. Transplants used for field planting.
4. If grown on beds, plant two rows per bed, with beds about 36–40 inches apart, and tops of beds 12–16 inches wide.

The following section contains an alphabetical list of vegetables with some special tips on how to grow them successfully.

For most vegetables, there are a number of varieties from which to choose, and it is not feasible to list all of them here. Those listed are the more common ones, or ones that can be grown with least difficulty. If you cannot always buy the suggested variety, your seed dealer can recommend another suitable for your locality.

INDIVIDUAL VEGETABLES

ARTICHOKE, GLOBE

Perennial. Suggested variety: Green Globe. Produces greatest yield and best quality in areas along the coast from San Francisco south to Santa Barbara. Can be produced in other areas, but with less success because with long, warm days, the bud scales become hard and unpalatable. Use offshoots or divisions from mature plants. Commercial plantings good for 4 to 5 years, but plants in home gardens may furnish enough buds for a longer period. Transplant in late fall or cooler part of year. Most buds can be harvested from early winter through early spring. Buds are ready to cut when scales have not spread, and before flowers appear. In cutting, include 1½ inches of stem. Harvest weekly in cool weather. Yield: 40 to 50 buds from a mature plant. Cut stalks off near ground when production period is over.

ASPARAGUS

Perennial. Suggested variety: Mary Washington. In winter or early spring, plant large, one-year-old plants, or crowns, 8 to 10 inches deep in a trench. Cover with about 2 inches of soil, fill in gradually after plants have made considerable growth. Do not harvest the first year. The second year, harvest only half the usual period. A bed may be cut for about 10 weeks after the second year. Spears are ready to cut in early spring when they are about 8 inches long. Cut at ground surface. Too long harvesting reduces future yields. A home garden bed should produce for at least 15 years. For white spears, cover the rows with an 8-inch mound of dirt in spring. Harvest when spears show through top of mound. Eat promptly or store in cool place.

BEANS, LIMA

Bush and pole types. Suggested varieties: Henderson's Bush ("baby" type, better for warm valleys); Fordhook; U.S. 242 (also produces in warm valleys). 65 to 90 days required from planting to first harvest. Pick when beans are full and green, before they turn white.

Snap beans which have been trained on strings. A few plants are ample for the average family.

BEANS, SNAP

Bush and pole types. Suggested varieties: Bush type (green) : Stringless Green Pod; Tendergreen; Plentiful; Bountiful; (yellow) : Pencil Pod Wax; Stringless Kidney Wax. Pole type: Kentucky Wonder; Blue Lake. Bush types produce in 50 to 60 days; pole types, about 10 days later. Pick at various stages of pod growth. Some prefer them when they are ⅓ maximum size, or at various older stages up to full-sized, but immature, beans. Pods are usually ready about 2 or 3 weeks after blossoms. Under good growing conditions, pickings may be made every 3 to 5 days.

BEETS

Suggested varieties: Detroit Dark Red; Crosby's Egyptian (matures early). Spring crop may be planted in January or February in most sections of California. Low temperatures may cause bolting of the root before it is mature. Early planting matures crop before curly top develops, in sections where leafhopper is prevalent. An August planting will be ready by November or December, and the roots may be left in the ground and pulled as wanted. Thin when plants are 4 inches high.

BROCCOLI

Suggested variety: Italian Green Sprouting. In cooler areas, may be grown most of the year; in warm interior valleys, a fall crop, and sometimes an early spring one, are grown. The immature flower head and part of the leaves and stems are eaten. If harvested before flower buds open, a single planting may produce for three months in late fall and winter.

BRUSSELS SPROUTS

Suggested variety: Improved Half Dwarf. Does well only along the coast, not in warmer areas. Sprouts form along the main stem. They may be harvested over a period of a month or more, as they mature from the bottom of the plant upward. Pick sprouts when they are hard, and outer leaves have a slightly yellow appearance.

CABBAGE

Suggested varieties: (early) Copenhagen Market, Early Jersey Wakefield; (intermediate) Glory of Enkhuizen; (late) Slow Bolting Flat Dutch, Danish Ballhead. Round Red Dutch is a red type; Chieftain, a savoy type. Cabbage may be grown throughout the year on the

The large, central head from a plant of green sprouting broccoli, right for harvest.

A mature head of Savoy Chieftain cabbage. This type has a pleasing flavor.

coast. Low temperatures may cause early bolting. In such areas, plant slow-bolting types or wait until the weather warms up. Cabbage does best in the interior valleys from late fall to early spring. Plants started in flats are ready for transplanting in about 8 to 10 weeks. Harvest when heads are solid. Cabbage will keep well in the field during cool weather; stores well after cutting.

CABBAGE, CHINESE

Suggested variety: Chihili. Used primarily for salad, also for greens. Matures in about 70 days, and is best planted to mature in late fall. Low temperatures, followed by long days, prevent heading. Grows rapidly and yields heavily. Harvest when heads are firm.

CANTALOUPES AND SIMILAR MELONS

Suggested varieties: Powdery Mildew Resistant No. 45 and No. 5; Hales Best; Persian; Honey Dew; Honey Ball; Casaba. Melons require high growing temperatures; do best in warm interior valleys. May be either orange- or green-fleshed. Most varieties require 90 days to produce fruit; Persian requires 120 days. Vines have separate male and female flowers, and are insect-pollinated. Male blooms do not set fruit. Harvest when fruit is at "full slip." This means when a slight crack completely circles the stem where it is attached to the fruit, so that the stem can be pulled off, leaving a smooth cavity. The slip does not develop in Crenshaw, Honey Dew, or Casaba. Harvest these when they soften and turn yellow. Melons may only be stored for a short period, except Casaba and Honey Dew, which store well for several weeks.

CARROTS

Suggested varieties: Nantes and Chantenay. Seeds start best under cool, moist conditions in the spring, but may be started in slightly warmer weather if soil is kept moist. Thin so that roots are 2 inches apart in the row. Carrots are ready for use about 85 days after seeding. Harvest when roots are large enough but still tender. May be stored in the ground during cool winter months.

CAULIFLOWER

Suggested varieties: (early) Snowball; (late) Pearl, and November-December. Grows best in cool, fairly moist climate.

Left: Snowball, an early variety of cauliflower. Right: November-December, a late type. Leaves of the late type curl over the curd to protect it from the sun.

Plants are ready for transplanting in 8 to 10 weeks after seeding. Snowball may be grown as both a fall and spring crop. It will produce good heads 2 months after transplanting. Late varieties take 4 to 6 months. If the leaves are not large enough to protect the curd, or head, from the sun, tie them together over the head when it is half grown. Harvest when head is of good size and still compact.

CELERIAC

Variety: Large Smooth Prague. Often called "celery root" because the enlarged root is the edible part. Follow same procedure as for celery, but do not blanch.

CELERY

Suggested varieties: (green) Utah; Golden Self-blanching. Usually grown from small plants. (If grown from seed, keep soil very moist. Seed should be just barely covered with soil. Seedlings are ready for field transplanting in 8 to 10 weeks after seeding.) Crop is ready for cutting in about 120 days after transplanting. Distance between rows depends on method of blanching; 4 feet are required for dirt blanching. Celery may be blanched by planting rows close together so that plants shade each other. Outside rows are blanched by covering with paper or boards. Individual plants may be blanched by wrapping with newspaper to cover 10 to 12 inches of the stalk. Stalks require 10 to 20 days to whiten. Harvest when blanching is completed. Blanching is not considered essential by some gardeners. If weather is cool, this crop keeps well when left in the garden.

CHARD

Suggested varieties: Broad Ribbed Green; Lucullus. Start crop in late winter or early spring to avoid severe damage from curly top. Plants bear heavily and produce greens most of the year. New leaves develop in center of plants as older ones are cut from outside. One plant will stand many pickings during a season.

CHAYOTE

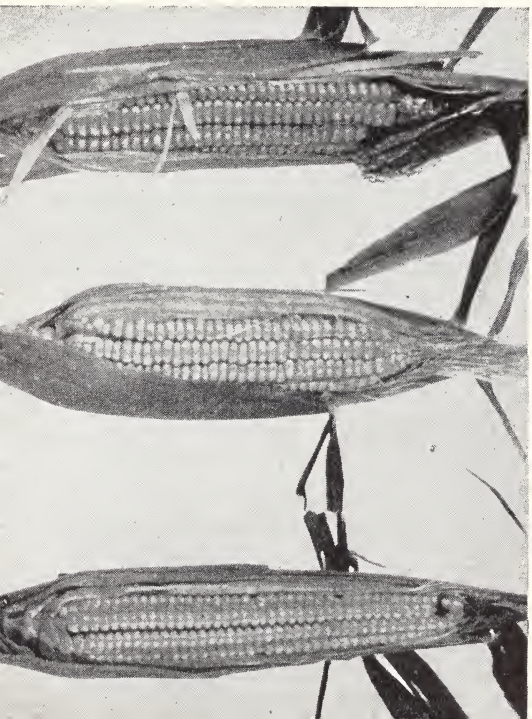
Perennial vine. Has growth habits similar to cucumber and muskmelon. Grows in cooler sections, for fall and early winter harvest. Plant the whole fruits in the spring. They should be placed on a slant in the soil, with stem end up. Train the vines on a trellis. Harvest as soon as fruits are full grown.

CHIVES

Perennial. Grow from seed or by division of a clump already established. Good for giving mild onion flavor to salads and other dishes.

CORN, SWEET

Suggested varieties: (yellow) Golden Bantam, Golden Cross Bantam, Ioana; (white, late) Oregon Evergreen. Thrives best when planted in small blocks of 4 or more rows, instead of a single row. Pollination is better in this type planting, and the ears will be well filled. (Removing suckers from base of plants does not increase yield.) For a continuous supply, plant small blocks every 2 or 3 weeks. If you want corn all summer, plant it in a warm, not hot, area. Harvest at the milk stage, since the sugar decreases and the starch increases as the kernel approaches the dough stage. Test for this by pushing your thumbnail into a kernel. If kernel is plump, and milk pops out, the ear is ready to pick. Husks on mature ears feel firm when grasped. Corn should be used immediately after picking. It does not keep well unless stored at near freezing temperature.



Top: Corn too mature for good eating. Center: Just right for harvesting. Bottom: Not mature.

CUCUMBERS

There are two types—slicing (for salads) and pickling. The latter are not usually grown in small gardens, since slicing types may also be used for pickling. Suggested varieties (slicing): Early White Spine, Improved Long Green, Cubit, Lemon; (pickling) National, Chicago Pickling. Should be planted and handled in same way as cantaloupes, although cucumbers are less sensitive to cool weather. Insufficient soil moisture may cause bitterness. Harvest slicing type when 8 to 10 inches long; pickling type, at about 3 inches. A small number of plants will give an ample supply.

EGGPLANT

Suggested variety, Black Beauty. A very few plants will meet the average family's needs. Should be planted and handled like tomatoes, but is slightly more sensitive to cold. Usually grown from seed in a hotbed, and transplanted when soil has warmed up. Harvest when fruits are 4 to 6 inches in diameter. Test by pressing with the thumb. If the flesh springs back, the fruit is green; if it does not, the fruit is mature. Harvest about half way between these stages. Cut with knife or pruning shears.

ENDIVE

Suggested varieties: Full Heart Batavian (escarolle); Large Green Curled. Grown for use in salads, as greens, or as a garnish. Planted and handled like lettuce, but is hardier, and may be produced as a winter crop in many sections where lettuce will not grow. Yields over longer period than lettuce. Crop is produced in 90 days. When plants reach 12 inches in diameter, tie leaves together at the top, to blanch the hearts. Do not tie when wet; this may cause decay. Harvest when well blanched.

FLORENCE FENNEL

Often called Finocchia or Sweet Anise. The bulblike enlargement at the base of the stem is eaten raw, like celery, or used for flavoring. Has a licorice flavor.

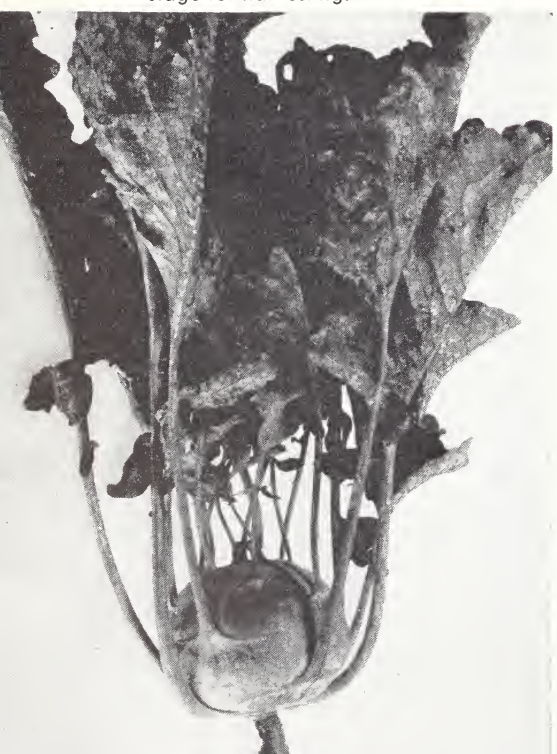
GARLIC

Does well in most parts of California if properly handled. A few feet of row will give an ample supply. Plant in fertile soil, in late fall, winter, or early spring. Fall planting is best if winters are not severe. Give same treatment as onions. Harvest when tops begin to die. If only a few plants are grown, tops may be braided, and the rope of garlic hung in a cool, dry place, for use as needed.

KOHLRABI

Suggested varieties: Purple or White Vienna. Edible part is the fleshy stem which forms just above the ground. Flavor is similar to turnip, but somewhat milder. Harvest when fleshy part is about 2 inches in diameter.

Early White Vienna kohlrabi at the proper stage for harvesting.



LEEK

Suggested variety: American Flag. Belongs to the onion group, but has only mild onion flavor. Does not form a bulb, but is about 1 to 1½ inches in diameter, and is blanched. Usually grown as a fall crop in most areas, and may be left in the field for some time after maturity. When plants are almost full size, draw soil around them to a height of 6 to 8 inches, to blanch lower part of the plants.

LETTUCE

Suggested varieties: (loose heading and leaf types) Cos (Romaine), Black Seeded Simpson; (head types) Great Lakes, Imperial 615, Imperial 847. Very sensitive to high temperatures. Winter crop is grown in Imperial Valley; spring, summer, and fall crops in the Salinas Valley and along the coast. Great Lakes is grown in the less favorable areas; Imperial 615 for winter, and 847 for summer crops in cool sections. Thin head lettuce to 12 inches between plants; leaf lettuce to 4 inches. Harvest when heads are firm.

MUSTARD

Suggested variety: Southern Giant Curled. A cultivated variety is better than the wild, for spring greens. Grown and handled like spinach. High in calcium and iron. Nutritionists believe those elements are more easily available to the human body in mustard than in spinach.

OKRA

Suggested varieties: White Velvet, Dwarf Green Long Pod. Sometimes called gumbo. Do not seed until soil is warm. This is a summer and fall crop. Soak seed in water for 24 hours before planting. Plant only those seeds that have swollen. Plants grow to height of 4 to 5 feet, and produce pods in about 60 days. After

pods begin to form, pick them every 2 or 3 days. The plants will stop bearing if pods are allowed to ripen on the stem. Do not cut the adjacent stem when picking pods, or no more will grow.

ONIONS

Suggested varieties: (early) Early Grano, California Early Red; (late) Sweet Spanish, Australian Brown. These varieties are grown for bulbs. Sweet Spanish is an excellent late type. If you want green onions, Spanish is a good variety.

There are three ways to start ripe onions:

1. From seed. Requires a longer growing period, and rows have to be thinned. Cheapest method, most generally practiced.

2. From sets. These are small, mature onion bulbs which are planted like seed. Easy method of production, gives early yield, but is expensive. Best method for the inexperienced gardener.

3. From transplants. Also easy, early, but expensive unless you raise your own plants.

Dry onions are ready to harvest when the tops fall over. Pull onions and dry them for a few days in the sun. Keep them covered with the tops to prevent sunburn. Store in a dry place. A few onion tops do not fall over. These are called "stiff necks." They do not keep well, and should be used soon after harvest.

Harvest green onions when they are ¼ to ½ inch in diameter.

PARSLEY

Suggested variety: Moss Curled (Extra Triple Curled). Grows best on fertile loam soil. Two or three plants may be grown near the kitchen. Plant seed in spring. In cool areas, the older leaves will be ready after a few months of growth, and you may then continue to pick them all summer, fall, and winter.

Black Seeded Simpson, a variety of leaf lettuce satisfactory for California gardens.

Above: White Boston, a butter head type of lettuce. Below: Great Lakes, one of the crisp, heading types.

Maturity is important to yield and quality. Top: Immature peas. These give low yield. Center, bottom: Peas at correct picking stage.

PARSNIPS

Suggested variety: Hollow Crown. Do not plant in soil that is too heavy. Seed germinates slowly and crop is slow to mature—3½ to 4 months. (Radish seed, which matures early, is sometimes planted with parsnip seed, to mark the rows for early cultivation.) Eating quality is improved by frost, and roots may be stored where grown. Storage in a moist atmosphere just above freezing also improves flavor.

PEAS

Vine or bush type. Suggested varieties: (bush) Laxton's Progress, Morse's Market, Progress No. 9; (vine) Alderman (Dark Podded Telephone). There is also a variety, Melting Sugar, which is prepared in the same way as snap beans—both seeds and pods are eaten. Peas do best when produced during cool weather, as warm weather makes the harvest season short. Bush peas may be grown in most areas of California; climbing types are best planted along the coast. Poles should be provided for climbing types. Height of poles will depend on the variety grown. Harvest when seeds in pods are well developed but tender enough so that they may be crushed between the fingers without separating into halves. Peas should be cooked as soon after they are picked as possible. If it is necessary to keep them for a short time, store in the refrigerator, and do not shell until ready to use.

Root of sweet potato which has produced sprouts for transplanting. Right: Single sprout with well established root, ready to be set out.

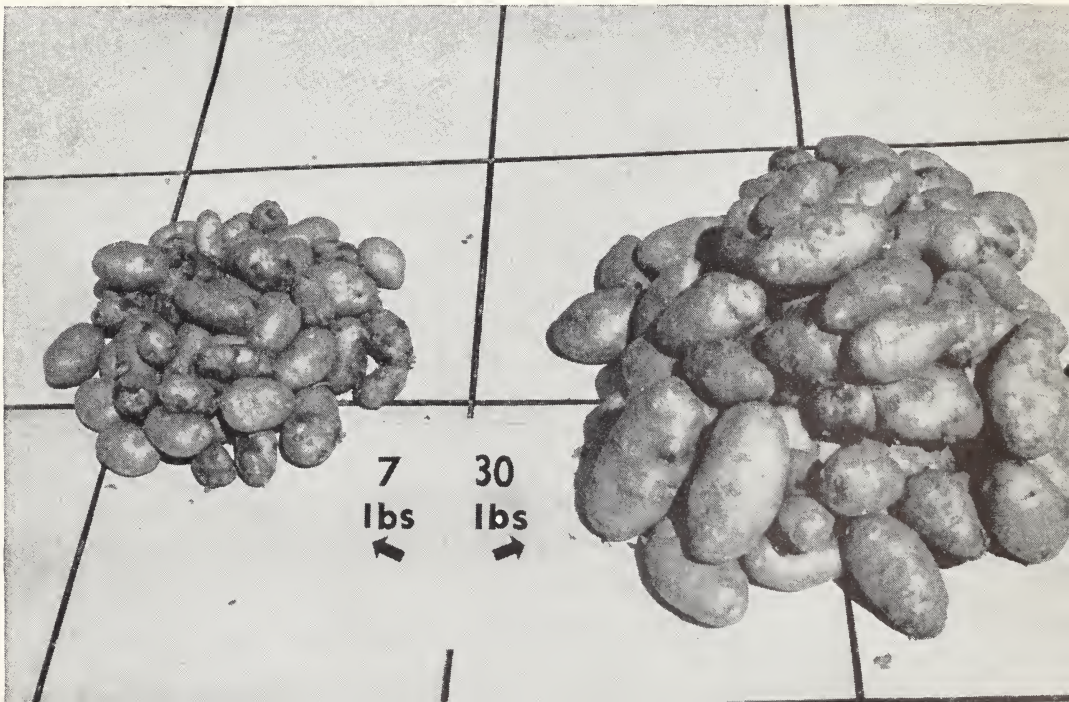
PEPPERS

Most home gardeners prefer the large-fruited, bell type. There are also small, hot varieties which may be used green, ripe, or dried. Of the bell type, California Wonder is a good variety with large, squarish, four-lobed fruits. A thicker-fleshed, smaller variety is Pimiento (Perfection). Cultural and climatic requirements for both types are the same as for tomatoes, but peppers need a fertile soil. You may start peppers in a hotbed or coldframe, for transplanting, or buy small plants from the nursery and set them out in the garden. Fruits may be harvested green or ripe. Hot peppers which are to be dried should be allowed to ripen on the plant. They turn red when ripe. They may then be cut, with one inch of stem, strung on a thread, and hung in a sunny place until dry and brittle. Use a sharp knife for cutting, as stems are tough.

POTATOES, SWEET

Suggested varieties: (moist type) Nancy Hall, Porto Rico; (dry type) Jersey. Grow best on light, sandy soil. Sensitive to temperatures below 50° F. Not grown along the coast or in northern sections of the state. Usually grown from sprouts or slips which are produced by the following method: Place small sweet potatoes in a hotbed about March 1. Cover with 3 to 4 inches of sand. In about 6 weeks, sprouts about 8 inches long will be ready. Pull sprouts and transplant to raised beds. You may grow several crops of sprouts from the same planting if you keep the hotbed moist. After sprouts have been set out, they need several light irrigations throughout the growing period. Potatoes may be harvested slightly immature if they are of suitable size, otherwise leave them in the ground until the roots are full grown and the vines begin to turn yellow. However, if leaves are killed by frost before they yellow, cut them off, dig the roots, and store them at once in boxes in a warm, dry cellar. Do not bruise the roots when digging, as this makes them more likely to decay. Sweet potatoes improve during storage, as a part of their starch content turns to sugar.

It pays to buy certified seed potatoes. Left: Yield from noncertified seed. Right: Yield from the same amount of seed, but certified.



POTATOES, WHITE

Suggested varieties: White Rose, Bliss Triumph, Netted Gem. If your garden is small, you will probably grow only a few potatoes for the early part of the season, since this vegetable is plentiful in all markets. Potatoes are grown from sections of tubers. Buy state-certified seed potatoes if possible. These have been tested and will be free from disease. Cut seed potatoes into pieces weighing from 1 to 2 ounces and having one or more eyes. Store cut pieces in a cool place for one or two days before planting so that the cut surfaces will dry and callus. This decreases rotting. Drop seed pieces into furrows 3 inches deep. Fill in the furrow to ground level and leave this way for two thirds of the growing season (about 2 months). Then add 3 more inches of dirt so that the seed pieces are then buried 6 inches deep. This covers the new potatoes and prevents greening. Potatoes are shallow-rooted and need irrigation at least once a week. Apply nitrogen fertilizer at planting time to increase yields. Harvest early potatoes when they are large enough for table use. Potatoes that are to be stored for later use should be left in the ground until the tops of the plants are partly dead. and the skin on the tubers is firm, not flaky. Store in a cool, dark cellar.

PUMPKINS

Suggested varieties: Small Sugar, Cheese, Connecticut Field. Give same care and treatment as winter squash.

RADISH

Suggested varieties: (white) White Icicle; (red) Scarlet Globe, Early Scarlet, Turnip, White Tip, Sparkler. This vegetable is easy to grow, and several crops may be planted during the season in cool areas. Radishes are ready to pull in 3 to 4 weeks after seed is planted.

RHUBARB (Pie Plant)

Perennial. Suggested varieties: Strawberry, Cherry. Grows best along the coast and in cool sections of the central valleys. Start plants in winter or very early spring. Rhubarb is grown from pieces of an old "crown" or rootstock, and each piece should have at least one good strong bud. Plants should be fertilized once a year, just before the cutting season. They should grow vigorously until early summer. They will then become dormant until the winter rains come. During this first growing season, few, if any, stalks will be ready to harvest. After this period, however, the plants should produce for 5 to 8 years. They should then be divided and the new rootstocks planted.

RUTABAGAS

Suggested variety: American Purple Top. Grow in cooler areas of the state, and are treated in the same way as turnips. Require 90 to 100 days to grow. Their quality is improved by a short storage period.

SPINACH

Suggested varieties: Prickly Winter (Hollandia), Giant Thick Leaved (Nobel). A cool climate is best for production, as during periods of warm temperature and long days, the plants are likely to produce seedstalks before making desirable foliage growth. Spinach will produce a year-round crop in cool coastal areas. Forty to 50 days are required to produce the spring crop. When ready to harvest, either the whole plant or only the large leaves may be cut. If only the leaves are cut, a second crop will grow.

SQUASH, SUMMER

Suggested varieties: Zucchini, Summer Straightneck, Yellow Crookneck, White

Bush Scallop (patty pan). Under good growing conditions, fruits are ready for first harvest 50 to 65 days after seeds are planted. Fruits are cut when immature—3 to 6 inches long.

SQUASH, WINTER

Suggested varieties: Gray Banana, Pink Banana, Table Queen, Butternut. Seed is planted 4 feet apart in hills with rows 6 feet apart, and thinned to 1 plant per hill. Plant when soil has warmed up in spring. Immature squash may be used as a substitute for summer squash, but those to be stored should be left to mature on the vine. Mature fruits have hard outer shells. Cut stems of fruits to be stored with a sharp knife. Leave a short piece attached, and avoid bruising. Store in a dry, fairly cool cellar.

TOMATOES

Suggested varieties: Earliana, Pearson, Marglobe, Pritchard. Although tomatoes are a warm-season crop, you may grow them even in cooler areas if you choose the right varieties. Earliana is good for an early crop and also as the main crop in cooler areas. Pearson is grown throughout the state, and sets well even at cooler temperatures. Earliana, Marglobe, and Pritchard are used for staked plants.

You may start tomatoes from seed, in a hotbed, around February 1. (See pages 8 and 9 for directions on seeding and transplanting.) Do not give too much water or fertilizer before seedlings are transplanted, and keep hotbed well ventilated on warm days. Early varieties may be spaced 3 feet apart, in rows 4 feet apart, since they produce less growth than later varieties, which should be spaced 5 to 3 feet apart.

Early varieties may also be set 1 foot apart in rows and trained to a single stem. Drive a stake into the ground beside each plant. Tie the main stem loosely to the stake at intervals. Pinch off side shoots as they appear. Staking is a good method where space is limited, and it produces clean, easy-to-pick fruits.

Early varieties are medium-rooted, and need several irrigations. In cooler areas, with an average annual rainfall of 15 inches, average yields may be produced without irrigation.

Blossoms of summer squash. Left: Male flower—does not produce fruit. Right: Female flower with partially matured squash.

Most plants do not set fruit from all blossoms. This may result from extremes of temperature, or an already heavy load of fruit on the plant. Harvest when fruits are red ripe. Toward the end of the season, there will be some whitish-green, full-sized tomatoes still on the vines. These may be picked and stored at 70° F to ripen.

Suggested variety: Purple Top White Globe. Crop may be produced in 60 days, and must be kept growing to prevent strong flavor. Requires care similar to that for beets.

Suggested varieties: Klondike R7 (solid dark green); Striped Klondike or Blue Ribbon (dark and light green stripes). Watermelons require lots of space, and are therefore limited to fairly large gardens. General methods of planting and handling are same as for cantaloupes. First fruits may be harvested about 80 days after seeds are planted. May be grown with fair success without irrigation in sections where winter rainfall is over 12 inches, and the soil stores 9 inches of water. Irrigation may increase the yield. When dry-farming is to be practiced, plant seed as early as possible in spring, and thin plants to one per hill. A good test for ripeness in watermelons is to rap the side of the fruit with the knuckles. A light, or metallic sound means that the fruit is still green; a dull sound means it is ripe. This test is most reliable in the early morning, for during the heat of the day, or after melons have been picked for some time, they all sound ripe, regardless of stage of maturity. Fruits have a "ground spot" where they rest on the ground, and this will turn slightly yellow as the fruit matures. Watermelons tend to become rough as they mature. The tendrils near the fruit darken and dry up as the fruit ripens. These tendrils are on the leaf closest to the melon. Do not pull melons off the vine; cut them with a sharp knife.

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Memo to Parents

IN RURAL COMMUNITIES

4-H CLUBS offer your children an opportunity for:

- **WHOLESOME COMPANIONSHIP** with boys and girls in their own age groups.
- **VALUABLE INCREASED SKILL** in one or more of these home projects:

  Livestock
  Poultry
  Rabbits
  Crops
  Clothing
  Home Furnishing
  Food Preservation

- **PROFITABLE RETURNS**, in money, from projects and good habits of thrift; in wider experience, through travel and increasing friendships; and in citizenship, through interest in community affairs.
- **MEMBERSHIP** is open to young people between 10 and 21 years of age.
- **FOR INFORMATION**, visit the office of the Agricultural Extension Service in your county.

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